FERC Pre-Filing Review
Draft Resource Report 8 – Land Use, Recreation, and Aesthetics
AES Sparrows Point LNG Terminal & Mid-Atlantic Express Pipeline

Submitted September 2006

SUMMARY OF REQUIRED FERC REPORT INFORMATION		
TOPIC	**FERC Reference**	**Report Reference or Not Applicable**
1. Classify and quantify land use affected by: a. Pipeline construction and permanent rights-of-way; b. Extra work/staging areas; c. Access roads; d. Pipe and contractor yards; e. Aboveground facilities. • For aboveground facilities provide the acreage affected by construction and operation, acreage leased or purchased, and describe the use of the land not required for operation.	§ 380.12(j)(1)	Section 8.3
2. Identify by milepost all locations where the pipeline right-of-way will coincide at least partially with existing right-of-way, where it will be adjacent to existing rights-of-way, and where it will be outside of existing right-of-way. • This may apply to the offshore as well	§ 380.12(j)(1)	Section 8.3.2
3. Provide detailed typical construction right-of-way cross-section diagrams showing information such as widths and relative locations of existing rights-of-way, new permanent right-of-way and temporary construction right-of-way.	§ 380.12(j)(1)	Resource Report 1, Appendix 1A
4. Summarize the total acreage of land affected by construction and operation of the project. • This applies to the offshore as well	§ 380.12(j)(1)	Table 8.3-1
5. Identify by milepost all planned residential or commercial/business development and the time frame for construction. • Identify all planned development crossed or within 0.25 miles of proposed facilities	§ 380.12(j)(3)	Section 8.4.1
6. Identify by milepost special land uses (e.g., maple sugar stands, specialty crops, natural areas, national and state forests, conservation land, etc. • This applies to the offshore as well, where it may include oyster and other shellfish beds, special anchoring or lighting areas, and shipping lanes.	§ 380.12(j)(4)	Section 8.5
7. Identify by beginning milepost and length of crossing all land administered by Federal, state, or local agencies, or private conservation organizations. • This applies to the offshore as well.	§ 380.12(j)(4)	Section 8.5.1
8. Identify by milepost all natural, recreational, or scenic areas and all registered natural landmarks crossed by the project. • This applies to the offshore as well. • Identify areas within 0.25 mile of any proposed facility.	§ 380.12(j)(4&6)	Section 8.5.2
9. Identify all facilities that will be within designated coastal zone management areas. Provide a consistency determination or evidence that a request for consistency determination has been filed with the appropriate state agency.	§380.12(j) (4&7)	Section 8.5.3
10. Identify by milepost all residences that will be within 50 feet of the construction right-of-way or extra work area.	§380.12(j) (5)	Table 8.4.2-1
11. Identify all designated or proposed candidate National or State Wild and Scenic Rivers crossed by the project.	§380.12(j) (6)	Section 8.5.2
12. Describe any measures to visually screen aboveground facilities, such as compressor stations.	§380.12(j) (11)	Section 8.6
13. Demonstrate that applications for rights-of-way or other proposed land use have been or soon will be filed with Federal land-managing agencies with jurisdiction over land that would be affected by the project.	§380.12(j) (12)	Section 8.7
Additional Information often Missing and Resulting in Data Requests		
Identify all buildings within 50 feet of the construction right-of-way or extra work areas.		Section 8.4.3-1
Describe the management and use of all public lands that would be crossed.		Section 8.5.1-1
Provide a list of landowners by milepost or tract number that corresponds to information on alignment sheets.		Resource Report 1, Appendix 1B
Provide a site-specific construction plan for residences within 50 feet of construction		Section 8.4.4

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8. LAND USE, RECREATION, AND AESTHETICS

8.1 Introduction

AES Sparrows Point LNG, LLC proposes to construct, own, and operate a new liquefied natural gas (LNG) import, storage, and regasification terminal (LNG Terminal) at the Sparrows Point Industrial Complex situated on the Sparrows Point peninsula east of the Port of Baltimore in Maryland. LNG will be delivered to the Sparrows Point LNG Terminal via ship, offloaded from the ship to shoreside storage tanks, regassified on the Sparrows Point LNG Terminal site (Terminal Site), and transported to consumers via pipeline. The LNG Terminal will have a regasification capacity of 1.5 billion cubic standard feet of natural gas per day (bcsfd), with potential to expand to 2.25 bcsfd. Regasified natural gas will be delivered to markets in the Mid-Atlantic Region and northern portions of the South Atlantic Region through the Mid-Atlantic Express Pipeline (Pipeline), which is an approximately 87-mile, 30-inch outside diameter natural gas pipeline to be constructed and operated by Mid-Atlantic Express, LLC. The Pipeline will extend from the LNG Terminal to interconnections with existing natural gas pipeline systems near Eagle, Pennsylvania. Together, the Sparrows Point LNG Terminal and Mid-Atlantic Express Pipeline projects are referred to as the Sparrows Point Project or Project. Both AES Sparrows Point LNG, LLC and Mid-Atlantic Express, LLC (hereinafter collectively referred to as AES) are subsidiaries of The AES Corporation.

AES is considering the possibility of building a combined cycle cogeneration power plant (Power Plant) on the Terminal Site. The Power Plant will be configured with one F-Class combustion gas turbine, one steam turbine, and associated auxiliaries. The Power Plant will operate only on natural gas, and will produce approximately 300 MW of clean electric power within an area of high energy demand. The Power Plant will be connected to the local utility electric system via an overhead transmission line. The Power Plant is addressed more fully in Section 1.10 of Resource Report 1, *Project Description*.

The Project footprint is located in the counties of Baltimore, Harford, and Cecil in Maryland and the counties of Lancaster and Chester in Pennsylvania. The Terminal Site, which is located entirely within Baltimore County, is a former shipyard. The route proposed for the Pipeline (Pipeline Route), which crosses all of the listed counties, comprises industrial, commercial, agricultural, and residential lands. Together, the Terminal Site and the Pipeline Route comprise the Project Area.

8.2 Objective and Applicability

Resource Report 8, *Land Use, Recreation, and Aesthetics*, addresses existing land uses along the various components of the Project that could be affected by construction or operation activities. It also identifies sensitive land uses near the Project, including residences and other special use areas.

This Resource Report provides a description of the potential impacts on land use, recreation, and aesthetics associated with the Project in six sections. Section 8.3 provides an overview of land uses. Section 8.4 describes potential impacts to residential and commercial properties. Section 8.5 describes the presence of public land, recreation, and other designated areas. Section 8.6 provides information on visual resources associated with the Project. Section 8.7 describes notification procedures for federal land management agencies with jurisdiction over land proposed to be occupied or crossed by the facilities associated with the Project. Section 8.8 contains references used to develop this Resource Report.

8.3 Land Use

Land use data were compiled from United States Geological Survey (USGS) 7.5-minute topographic quadrangle maps, aerial photographs (base photos used for alignment sheets – Appendix 1A or Resource

Report 1), and field reconnaissance surveys conducted in May through August 2006. Land uses were classified according to predominant activities occurring within the proposed construction areas. The following descriptions, consistent with the Commission guidance for environmental report preparation and land uses associated with the project area, are used in classifying land use in this Resource Report:

Agricultural Land: active cropland, pastureland, hay fields, nurseries, orchards, commercial tree stands, and associated facilities and features, including farm buildings.

Forest Land: wooded lands not being used for other specific purposes.

Open Land: non-forested uplands, including utility rights-of-way and existing fenced maintained lawn associated with aboveground facilities.

Wetlands/Waterbodies: wetlands and waterbody crossings less than 100 feet.

Open Water: waterbody crossings greater than 100 feet.

Residential Land: residential yards, residential subdivisions, and planned new residential developments.

Industrial/Commercial Land: electrical power or gas utility stations, manufacturing or industrial plants, landfills, mines, quarries, commercial or retail facilities, and roads.

Other: miscellaneous special use areas (land associated with schools, parks, places of worship, cemeteries, sports facilities, campgrounds, golf courses).

Table 8.3-1 identifies the impact types associated with each of the Sparrows Point Project components and summarizes the total acreages associated with both temporary and permanent impacts for each Project component.

8.3.1 Terminal Site

The Terminal Site was formerly owned and operated by Bethlehem Steel Corporation as a steel manufacturing and shipbuilding facility. Currently, the Terminal Site is owned by SPS Limited Partnership LLLP as part of a larger 226 acre parcel that was separated from the larger Bethlehem Steel tract. The 80-acre Terminal Site consists of approximately 45 acres of industrial land and 35 acres of nearshore riparian rights area. This area is shown in Resource Report 1, Figure 1.3-2.. Industrial lands composed of abandoned buildings, roads, docks, and railroad beds make up and surround the Terminal Site.

Construction of the LNG Terminal will be accomplished using a workspace totaling approximately 80 acres (Figure 1.3-2). During the construction period approximately 35 acres will be used for the dredge material processing facility (DMPF) and temporary staging and equipment storage areas, The DMPF will comprise a 5-acre processing area and 10-acre storage area for the processed dredge material (PDM – see Figure 1C-3 of Appendix C to Resource Report 1, Dredge Material Recycling Facility Plan). The temporary staging and equipment storage area will comprise approximately 20-acres as additional temporary workspace (see Resource Report 1, Figure 1.3-2, Sheet 7, Terminal Construction Additional Temporary Workspace). After construction is completed, these areas will be cleaned up and restored to pre construction conditions. Following construction, the land-side 45-acre area of the 80-acre terminal property will continue to be retained as a permanent operational area. Because the Terminal Site and all surrounding property are currently zoned for industrial purposes, construction of the LNG Terminal will cause no change in land use in this area. Such usage of the land area is entirely consistent with the

Baltimore County Master Plan 1989-2000, as amended July 27, 1989, (BC Plan). The BC Plan identified the area of the proposed Terminal Site as industrial (for purposes of land use), as an industrial employment area (for purposes of development policy), and as high ground with pollution potential (for purposes of environmental policy). The BC Plan also encouraged the re-use of land at Sparrows Point for new industrial purposes.

Construction and operation of the LNG Terminal is also consistent with the future development plans of Dundalk and Turner Station, which are two of the communities closest to the Terminal Site. A discussion of the consistency of those plans with the activities proposed by AES at the Terminal Site is contained in Section 5.4.1.9 of Resource Report 5, *Socioeconomics*.

8.3.2 Pipeline Facilities

The proposed Pipeline will consist of approximately 87 miles of 30-inch outside diameter natural gas pipeline which will extend from the LNG Terminal in Baltimore County, Maryland to three interconnect locations in Chester County, Pennsylvania. The Pipeline Route is shown in Figure 1.3-3 in Resource Report 1.

Construction and Permanent Rights-of-Way

The Pipeline will be installed within a 50-foot-wide permanent right-of-way (ROW). During construction in non-agricultural lands, 25 feet of additional temporary space will be required (in aggregate a temporary 75-foot construction right of way, or "CROW") to allow crews to safely construct all Pipeline facilities. In areas where additional working width is necessary (e.g., stockpile topsoil in agricultural lands) the CROW may be expanded up to 25 feet to accommodate the additional need (thus comprising a 100-foot CROW). Typical configurations for the Pipeline ROW and CROW are shown on Resource Report 1 Figure 1.3-5. Similarly, in areas where the ROW must be restricted (e.g., near residential areas) the CROW would be reduced accordingly. The CROW will be expanded or reduced as necessary (i.e., by length and/or width) as shown on alignment sheets (see Resource Report 1 - Appendix 1A) to accommodate crew needs and site conditions. Additional temporary workspace (ATWS) will be used where necessary to accommodate construction methods, materials, and/or equipment (e.g., road and railroad crossings, equipment turn-arounds, and waterbody crossings).

Land uses for the project were calculated by approximate length, and acreage was calculated for each land use type using polygon analysis for both the permanent and temporary rights-of-way. The polygons approximate amount of land associated with the right-of-way and work spaces as the alignment crosses different land uses. Therefore, note that there is not a direct multiplier conversion of length crossed to acreage associated with that length because the polygons do not intersect the alignment at right angles at all locations.

Land use types along the Pipeline consist of forest land, agricultural land, wetlands/waterbodies, roadways, open land, residential land, and industrial/other land. Table 8.3.2-1 provides quantitative data for the impacts of temporary construction workspace and permanent maintained right-of-way requirements on these land use types, including linear distance, percentage, and acreage. Table 8.3.2-2 provides similar data for all ATWS areas.

Agricultural land is the dominant land use type along the Pipeline Route, comprising 199,715 linear feet (approximately 419.8 acres) and approximately 43.0 percent of the total distance. Agricultural land along the Pipeline Route consists primarily of hayfields and pastures. Agricultural land will be temporarily impacted during construction of the Pipeline, including the temporary removal of approximately 190.6 acres from use during construction, and will be restored to its original state after installation is complete.

The approximately 229.2 acres of permanent maintained right-of-way for the Pipeline will have no permanent effect on agricultural land because it will also be restored to preconstruction conditions and agricultural practices, including cultivated crop production and/or pasture land, following construction.

Forest land is the second largest land use type along the Pipeline Route, comprising 81,724 linear feet (approximately 201.3 acres) and approximately 17.6 percent of the total distance. As defined above, forest land along the Pipeline Route consists of both deciduous and coniferous forests. Of the approximately 201.3 total acres cleared for construction, approximately 92.2 acres will be allowed to naturally revert back to a forested condition following construction. However, the permanently maintained right-of-way for the Pipeline will result in some loss of forest because approximately 109.1 acres of forest land will be permanently maintained as open land following construction.[1]

Open land is the third largest land use type along the Pipeline Route, comprising 60,763 linear feet (approximately 106.7 acres) and approximately 13.1 percent of the total distance. As defined above, open land along the Pipeline Route consists of undeveloped land and utility rights-of-way (pipeline and power line). Open land will be temporarily impacted during construction of the Pipeline, including the temporary clearance of approximately 36.9 acres. However, the approximately 69.7 acres of permanent maintained right-of-way for the Pipeline will not permanently impact open land because it will be either restored, or allowed to naturally revert, to open land conditions following construction.

Residential development is the fourth largest land use type along the Pipeline Route, comprising 46,585 linear feet (approximately 94.6 acres) and 10.0 percent of the total distance. Residential development along the Pipeline Route consists of 155 residences located within 50 feet of the construction workspace (see Section 8.4). Approximately 54.1 acres of residential development will be incorporated into AES's permanent maintained workspace. AES will adjust its temporary construction workspace through these three areas to facilitate construction of the Pipeline (see Section 8.4). Although approximately 40.5 acres of residential development will be temporarily impacted during construction, there will be limited permanent impacts to these areas because they will be restored to preconstruction conditions and residential uses will be continued along the permanent maintained right-of-way following construction. However, certain residential practices may be restricted or prohibited within the 54.10 acres of permanent maintained right-of-way (such as erection of permanent structures and planting of deep rooted vegetation/trees over the permanent maintained ROW). In no instance is it anticipated that construction or operation of the Pipeline will result in demolition or removal of residential structures.

Industrial/commercial land is the fifth largest land use type along the Pipeline Route, comprising 37,816 linear feet (approximately 72.1 acres) and approximately 8.2 percent of the total distance. This land use type consists primarily of utility easements, impervious surface and landscaped areas associated with parking lots of commercial development, as well as numerous road crossings. Approximately 44.2 acres of industrial/commercial land will be incorporated into AES's permanent maintained right-of-way. AES will consult with the appropriate agencies so that construction across existing roads will be performed in accordance with applicable state and/or local permit stipulations for road crossings.

Wetlands/waterbodies (including open water) is the smallest land use type along the Pipeline Route, comprising 37,508 linear feet (approximately 51.0 acres) and approximately 8.1 percent of the total distance. The open water land use type consists of one major waterbody crossing, the Susquehanna River and several minor and intermediate water body crossings. Resource Report 2, *Water Use and Quality*,

[1] As described in more detail in Resource Report 3, Section 3.4, the impacts associated with the permanent loss of forest land are mitigated by the fact that AES proposes to construct the Pipeline along existing open ROW corridors for the majority of the Pipeline Route and will, in large part, not be creating new corridors through wooded property.

and Resource Report 3, *Vegetation and Wildlife*, discuss the temporary and permanent impacts of Pipeline construction on wetlands and waterbodies.

Existing Rights-of-Way

In selecting the proposed Pipeline Route, AES sought to maximize the use of existing utility and highway rights-of-way, thereby minimizing potential impacts to individual landowners and previously undisturbed lands. The initial 2±miles of pipeline are located within primarily within privately owned properties on Sparrows Point before intersecting the Route 695 highway corridor. Thereafter, the Pipeline Route parallels the following existing rights-of-way:

- Interstate 695 (approximately MP 2.0 to 8.0);
- BG&E overhead transmission corridor (approximately MP 8.0 to 32.5); and,
- Columbia Gas pipeline corridor (approximately MP 32.5 to 87.6).

A total of approximately 85.6 miles (98 percent) of the overall route length is located parallel to, and wherever possible overlapping with, existing utility and highway rights-of-way. Typical layouts of project construction and permanent rights-of-way paralleling these existing rights-of-way are included on Figure 1.3-5 in Resource Report 1, *Project Description*.

8.3.3 Aboveground Facilities

Construction of the Pipeline will require installation of six to ten mainline valves and three interconnect metering facilities (Table 8.3.3-1). AES will finalize the site selection for aboveground facilities prior to submission of its formal application.

The permanent land requirements for these facilities are limited to the footprint of the facility and sufficient area to secure the sites with fencing and provide needed access. A typical layout of meter-regulator and interconnect facilities is provided in Resource Report 1, Figure 1.3-7. Additional land at these locations will be required on a temporary basis during construction to provide sufficient access and adequate space for material laydown, equipment, and worker safety. Following construction, land use in temporary construction workspaces will be restored or allowed to revert naturally to preconstruction land use types and vegetation cover types. Permanent land use impacts will result but are expected to be minimal and overlap as possible with existing pipeline right-of-way associated with the existing facilities. These areas are necessary for the retention of permanent operational areas resulting from modifications to each aboveground facility following construction.

Land use impacts associated with modifications to the proposed aboveground facilities will be compiled and submitted to the Federal Energy Regulatory Commission (“Commission”) as the pipeline design is completed and the sites are selected. Table 8.3.3-1 will summarize the land use types associated with each of these aboveground facilities and the acreages associated with both temporary and permanent impacts to these land use types.

8.3.4 Staging Areas

With respect to the Pipeline, AES has not finalized the site selection for staging areas associated with the Pipeline Route. Land use data for staging areas will be compiled and submitted to the Commission as the pipeline design is completed and the sites are selected.

With respect to the proposed LNG Terminal, AES is proposing a 10,000 cubic yard per day dredged material recycling facility ("DMRF") that will occupy approximately 5.5 acres of the upland portion of

the Terminal Site which is shown on Figure 1C-2 of Resource Report 1. Existing site roadways will be used to transport the processed dredged material ("PDM") from the pugmill processing system to the temporary PDM storage area. The temporary PDM storage area will consist of an additional 9.5±acre area (comprising a total aggregate area of approximately 15-acres) covered by bituminous paving or lined with a 10-mil HDPE (high density polyethylene) liner covered by 6- to 12-inches of existing site soil or imported soil. Additionally, AES is proposing to use an area, approximately 20 acres, to the north of the site for construction laydown and marshalling yard for equipment (Figure Resource Report 1, Figure 1.3-2, Sheet 7).

8.3.5 Access Roads

To the maximum extent practicable, access for both construction crews and the delivery of materials and equipment for the Project will be from the intersection of the Project with existing permanent public and private roads and public highways. However, construction of the Pipeline, including associated aboveground facilities, will also require the temporary use of additional existing and new access roads.

The location of access roads has not been fully evaluated at this time and land use data for areas crossed by access roads will be included within future submittals to the Commission as detailed in Table 8.3.5-1. Access roads will also be identified on the alignment drawings of Appendix 1A to Resource Report 1.

Land use types crossed by these access roads are discussed below by Project component. The effects of temporary use of access roads on any adjacent residences and businesses during the short-term construction period will be similar to those for other construction activities (see Section 8.4.4).

Terminal Site

Existing permanent public and private roads will be utilized to access the Terminal Site. Access to the Terminal Site will be the same for both activities associated with the LNG Terminal and those associated with the Power Plant.

Mid-Atlantic Express Pipeline

The location of access roads associated with the Pipeline Route has not been fully evaluated at this time. Land use data for areas crossed by access roads will be included in submittals to the Commission prior to or within the formal filing of the Resource Reports to the Commission in the fourth quarter 2006.

Aboveground Facilities

The location of access roads associated with the aboveground facilities has not been fully evaluated at this time. Land use data for areas crossed by access roads will be included in submittals to the Commission prior to or within the formal filing of the Resource Reports to the Commission in the fourth quarter 2006.

8.3.6 Facility Abandonment/Replacement

The Project does not call for the abandonment or replacement of facilities. At some time in the future, facilities associated with the Project could be decommissioned and abandoned, but the circumstances and timing are not known and cannot be predicted with any reasonable accuracy (see discussion in Section 1.7.2 of Resource Report 1, *Project Description*).

8.4 Residential and Commercial Areas

8.4.1 Landowner and Agency Notification and Consultation

In accordance with 18 CFR §157.6(d), AES will provide notification to landowners, regulatory agencies, libraries, and newspapers within three business days following the date that the Commission issues a notice of application. AES will publish a notice of the application in a daily or weekly newspaper of general circulation in which the Project is located within 14 days after the Commission assigns a docket number to the application. As indicated previously in submittals to Commission staff, AES anticipates submitting its formal filing for the project in the 4th quarter of 2006.

The majority of land crossed by the project is privately owned (approximately 94 percent). Temporary and permanent easements will be acquired from landowners to build the pipeline. Appendix 1B of *Resource Report 1* contains the names and addresses of all landowners affected by the project based on the current alignment and anticipated construction workspaces. Over the last several months, AES has attempted to communicate directly with affected landowners concerning all aspects of the Project. AES provided notice to landowners of its informational open houses held in May and June 2006, and invited public participation at those meetings. Prior to those Pre-Filing status public outreach meetings, AES met informally with numerous community organizations, many of which included affected landowners. At the time of the public outreach open houses, AES also provided affected landowners with a letter that introduced the Project, invited contact with AES representatives and requested survey access permission. Furthermore, prior to the start of the Pre-Filing process, AES developed and continues to maintain two websites – http://www.aessparrowspointlng.com and http://www.mid-atlanticexpress.com -- that provide information about the project, project geography, safety, anticipated impacts of the Project on the local economy and ecology, as well as general information about LNG safety and potential environmental impacts. AES employed nine (9) field land agents who have been able to contact 91 percent of landowners, which landowners have since granted AES survey access permission to date for approximately 89 percent of the Project area property needed for the main pipeline alignment and including property for route variations in areas where one of more localized route variations are under consideration. AES will continue to coordinate with public and private landowners for survey access and to provide project information and responses to questions through its land agents and project personnel. The process of seeking and obtaining easements for private land and licenses or permits for public land crossings will be performed in conjunction with AES application process to the Commission and timed to be consistent with the anticipated date of Certificate issuance by the Commission.

Notification and consultation with county and municipal agencies was initiated in June 2006 to request information for land uses associated with existing residences and buildings, planned residential and commercial/business developments and subdivisions, and special use areas. Copies of agency notification and consultation documents are provided in Appendix 8A of this Resource Report, and a list of agency contacts is provided in Table 8.4.1-1.

8.4.2 Planned Residential and Commercial Development

General information for land use in the Project area was obtained from such sources as web sites, aerial photographs of the Project area and discussions with other local agencies. AES also initiated consultation with county and local planning agencies in June 2006 to identify all planned residential or commercial/business developments and subdivisions that will be crossed by, or located within 0.25 mile of the construction workspaces for the Project.

As summarized in Tables 8.4.1-1 and Table 8.4.2-1, AES contacted and sent letters to county and local planning agencies and made several telephone calls requesting assistance in providing any information that will help prepare a thorough assessment of potential impacts to existing and proposed land uses within the areas under your jurisdiction or administration, including requesting the identification of

specific land uses of local significance or concern in the immediate vicinity of the project area. Special land uses specifically identified included any planned residential, commercial, or business development; land owned by local public agencies; land owned by local private conservation agencies (nature preserves, conservation areas, or wildlife management areas); locally significant historic or cultural sites or properties; locally significant natural, recreational, or scenic areas (including roads and viewsheds); locally owned public or recreation areas (such as campgrounds, golf courses, race tracks, etc.); flood control land; landfills and hazardous waste sites; and/or quarries or mines.

Of the 23 county and local planning agencies contacted, five (5) provided specific land use information. Harford County Maryland identified 11 planned residential or commercial developments within 0.25 mile of the construction workspaces for the Project that are listed in Table 8.4.2-1 (Harford 2006). No other municipality provided information which indicated planned residential or commercial developments within 0.25 mile of the construction workspaces for the Project.

8.4.3 Existing Residences and Businesses

Table 8.4.3-1 lists the distances and directions to residences and other buildings within 50 feet of the construction workspace for the Terminal Site, the Pipeline, the Power Plant, and the aboveground facilities associated with each of those components of the Project. In total, 155 residences and 23 other buildings are located within 50 feet of the Project.

8.4.4 Project Impacts and Mitigation

Planned Residential and Commercial Development

As indicated above, AES contacted counties, towns, and other municipalities along the proposed project corridor for information on planned residential and commercial development in the Project area. Mitigation measures to address proposed residential and commercial development may include such items as avoiding removal of mature trees and landscaping within the edge of the construction workspace unless necessary for the safe operation of construction equipment; restore all lawn areas and landscaping within the construction workspace, consistent with the Commission's Recommended Plan as included within Commission's Guidance Manual for Environmental Report Preparation dated August 2002, immediately after backfilling the trench; reducing the construction workspace such that a minimum of 10 feet between the residence/building and the construction workspace is maintained for a distance of 100 feet on either side of each structure; installing safety fencing along the construction workspace adjacent to each structure for a distance of 100 feet on either side of the residence/building to ensure that construction equipment and materials, including the spoil pile, remain within the construction workspace; maintaining safety fencing throughout open trench phases of pipe installation. All of the above mitigation measures are under review by AES; determinations on the method of mitigation will be compiled as the alignment of the project is finalized and design progresses; these measures will be submitted to Commission after the methods are selected prior to or as part of the formal filing to be made the 4th quarter of 2006.

If AES receives new information from county and/or local planning agencies identifying the locations and timeframes for any planned residential or commercial/business developments and subdivisions that will be located within 0.25 miles of the construction workspaces for the Project, AES will propose coordination and/or mitigation measures to avoid or minimize construction impacts of the Project on any planned residential or commercial/business developments and subdivisions. Upon completion of construction, it is anticipated that there will be little to no adverse effect on planned residential or commercial/business developments or subdivisions from operation of the pipeline. Pipeline related activities will be limited mainly to periodic inspections. On occasion, maintenance and repair may be required, which will include activities similar to construction, though typically in a more limited

geographic area and or more sporadic and limited frequency than inspection visits. This type of activity will be very short-term in nature.

Existing Residences and Buildings

Construction of the Project will not directly impact existing residences and buildings that would not be owned or controlled by AES. However, 155 residences and 23 other buildings are located within 50 feet of the pipeline construction workspace and permanent maintained workspace (see Table 8.4.2-1). Construction activities associated with the Project may cause minor interference with the use and/or enjoyment of the residences and other buildings, mainly from increased noise, heavy vehicle traffic, and dust. However, these adverse effects are expected to be short-term in nature, lasting only a few weeks at any particular location, and they will be limited to daylight hours, generally Monday through Saturday. AES will employ land agents during construction that will notify and coordinate with landowners throughout the construction process to inform them of when construction activities will be occurring in the vicinity of their homes. The land department will also maintain a toll free hotline for landowners to call to inquire about construction activities. Temporary disruptions of traffic patterns during road crossing activities will be minimized by using flaggers and minor temporary detours if necessary. Many roads will be bored to avoid interruption, and roads that must be open cut will be plated and installed as quickly as possible, typically within one working day. Fugitive dust that may develop along the ROW will be controlled by use of water trucks as necessary. Construction procedures to avoid disruption and minimize impacts are summarized in specific plans for project elements such as but not limited to Environmental Construction, Dredge Management, Spill Prevention, Unanticipated Discovery, and other plans described in Resource Reports 1, 2, 4, 6 and 11.

To minimize impacts on the residences and other buildings that are not owned or controlled by AES, AES will develop site-specific plans ("Residential Mitigation Plans") to avoid impacts to these structures during Pipeline construction. These site-specific plans will include the following procedures:

- Maintain a minimum separation distance of 25 feet between each residence/building and the Pipeline.
- In congested areas, designate the construction workspace such that a minimum of 10 feet between each residence/building and the construction workspace is maintained for a distance of 100 feet on either side of each structure.
- Avoid the removal of mature trees and landscaping within the edge of the construction workspace unless necessary for the safe operation of construction equipment;
- Restore all lawn areas and landscaping within the construction workspace, consistent with the Commission's Recommended Plan, after backfilling the trench;
- Install safety fencing along the construction workspace adjacent to each structure for a distance of 100 feet on either side of each residence/building, to ensure that construction equipment and materials, including the spoil pile, remain within the construction workspace; and
- Maintain safety fencing throughout open trench phases of pipe installation.

Residential Mitigation Plans will be included within submittals to the Commission when final alignment is determined during final design. An typical Residential Mitigation Plan is being developed for inclusion in the Best Management Practice (BMP) plan set appended to Resource Report 2.

8.5 Public Land, Recreation, and Other Designated Areas

8.5.1 Agency Notification and Consultation

In accordance with 18 CFR §157.6(d), AES will provide notification to landowners, regulatory agencies, libraries, and newspapers within three business days following the date that the Commission issues a notice of application. AES will publish a notice of the application in a daily or weekly newspaper of general circulation in each area in which the Project is located, within 14 days after the Commission assigns a docket number to the application.

8.5.2 Public or Conservation Land

No portions of the LNG Terminal or the Power Plant will be located on public or conservation land. As for the Pipeline, it will not cross any federally-owned land, including national parks or forests; Indian reservations; national wilderness areas or registered national natural landmarks; national wildlife refuges, waterfowl production areas, or coordination areas; or historic trails designated through the National Trails System Act of 1968, as amended (based on review of Census 2006; United States Department of the Interior, National Park Service [NPS] 2006a; NPS 2006b; NPS 2006d; NPS 2006f; NPS 2006g; National Wilderness Institute 2006; The Nature Conservancy 2006; United States Fish and Wildlife Service [USFWS] 2006; USFS 2006a; USFS 2006b; Wilderness Institute 2006).

Construction of the Pipeline will require crossing some publicly-owned parcels of land as identified within Table 8.5.1-1 – Publicly Owned Parcels or Parcels Containing Conservation Easements Crossed by the Sparrows Point Project. These properties and pertinent information as to routing through or along them is discussed below.

In Maryland, two crossings of Gunpowder Falls State Park will be required for construction of the Pipeline, no matter what pipeline route alternative is considered (see Resource Report 10); the preferred route evaluated herein is based upon minimizing impact to this crossing by using an exiting utility corridor (powerline) for the crossing location. The crossings will be from MPs 18.15 to 18.36 and 22.24 to 22.68. Gunpowder Falls State Park contains nearly 18,000 acres and is located within the counties of Harford and Baltimore (Maryland Department of Natural Resources [MDNR]. 2006a). The park is a long, narrow park with varied topography that was established to protect the stream valleys of the Big and Little Gunpowder Falls and the Gunpowder River. Both segments of the Pipeline that will cross Gunpowder Falls State Park will utilize existing rights-of-way to cross these portions of the park. AES will minimize tree clearing to the maximum extent practicable while still maintaining safe working conditions.

Beginning at MP 7.63, the Pipeline Route parallels I-695 and crosses and parallels property owned by the State of Maryland State Roads. The Pipeline Route follows Route I-695 in a north and northwest direction, except for minor deviations necessary to avoid highway interchanges for approximately six miles.

In Maryland, the Pipeline will not cross any other state-owned land, including state forests; state game lands or wildlife management areas (based on review of MDNR 2006b).

In Pennsylvania, the Pipeline will not cross any state-owned land, including state forests; state game lands or wildlife management areas; state-designated natural or wild areas; or state-designated recreation or scenic areas (based on review of PDCNR 2006a; PDCNR 2006b; PDCNR 2006d; PDCNR 2006h; PDCNR 2006i; Pennsylvania Game Commission 2006).

AES contacted landowners, local governments and conservancies beginning in May 2006 to identify parcels encumbered by conservation easements that will be crossed by the Project. Sixty four (64) parcels

that contain conservation easements, most of which are agricultural easement, were identified and are listed within Table 8.5.1-1 – Publicly Owned Parcels or Parcels Containing Conservation Easements Crossed by the Sparrows Point Project. Additional publicly owned parcels, such as publicly owned parcels utilized as landfills are discussed within Section 8.5.5 under the heading, "Contaminated Sites and Landfills" and schools and parks, were identified and discussed within Section 8.5.5 under the heading, "Special Land Use".

8.5.3 Natural, Recreational, or Scenic Areas

No portions of the LNG Terminal or the Power Plant, and no facilities associated with the Pipeline, occupy or cross any federally designated or recognized natural, recreational, or scenic areas, or registered natural landmarks, including National Scenic and Recreational Rivers; National Wild and Scenic Rivers; recreational, scenic, or historic trails designated through the National Trails System Act of 1968, as amended; or wilderness areas designated under the Wilderness Act of 1964, as amended (based on review of NPS 2006a, NPS 2006b, NPS 2006d, NPS 2006e, NPS 2006f, National Wilderness Institute 2006).

Construction of the LNG Terminal and Pipeline will require crossing some natural, recreation or scenic areas. These areas and pertinent information as to routing through or along them is discussed below.

In Maryland, the Chesapeake Bay is a resource used for recreational fishing and boating. During various seasons, charter boat companies and private individuals use the Bay to fish for flounder, white perch, and striped bass among other species. In addition, blue crab is one of the most important species harvested in the Bay (MDNR. 2006d.).

The Pipeline Route is located near or crosses four (4) trails:

- The first trail discussed is the Star-Spangled Banner National Historic Trail crosses eight counties within the boundaries of the State of Maryland, the City of Baltimore, Maryland, and Washington, District of Columbia (Star Spangled Banner National Historic Trail Study 2005). The trail traces the route from the arrival of the British fleet in the Patuxent River in Calvert County and St. Mary's County, Maryland, in the War of 1812, to Fort McHenry, the site of the victory of the Americans on September 14, 1814. While the Star Spangled Banner Trail has not yet been established as a National Scenic Trail, the route is subject to consideration for the designation. The trail comes ashore approximately 2.5 miles east of the proposed Terminal Site and continues north towards and parallels I-695. The Pipeline Route crosses the proposed trail at approximately MP 2 where both the trail and Pipeline Route parallel I-695. The route of both the pipeline and the Star Spangled Banner trail parallel an existing highway corridor. Cultural resource surveys, which are summarized within Resource Report 4, were conducted along the Pipeline Route within the highway corridor. The surveys confirmed the area is predominately disturbed and that cultural resources were not identified.

- The Old Maryland and Pennsylvania (MAPA) trail is a portion of the Maryland and Pennsylvania Railroad, which was established in 1901 and was a narrow gauge seventy-seven mile line that connected Baltimore, Maryland and York, Pennsylvania. The Maryland portion was abandoned in 1958; the Pennsylvania portion was abandoned in the 1980s. Since then, the Maryland and Pennsylvania Railroad Preservation Society has worked to preserve this railroad (MAPA 2006). Harford County Department of Parks and Recreation's "Rails to Trails" project has since developed a portion of the railroad line from Heavenly Waters Park in Bel Air to Friends Park in Forest Hill as a recreational trail (Harford 2006). The first phase, 1.9 miles between Tollgate Road and Williams Street in Bel Air, is a hiker, biker, and equestrian trail with a spur connector (walkers only) leading to the Harford Mall and Harford Mall Annex. The second phase, which

was completed in the Fall of 2000, connects the Blake's Venture park off Bynum Road in Forest Hill to Friends Park. The third phase, which is currently in the planning stage, will run from Tollgate Road south, behind the Equestrian Center, cross over Winters Run, and traverse the rolling hillside of Edgeley Grove Farm. The Pipeline route crosses the old MAPA Railroad at Milepost 31.80; however, the Pipeline Route does not cross the Harford County Department of Parks and Recreation's recreational trail project. The crossing of the MaPa trail is along an existing right-of-way the Pipeline Route is paralleling and is anticipated to be a perpendicular crossing to minimize impacts. As such impacts associated with crossing are minimal.

- The Brandywine trail is 35-miles long and located in the Brandywine Valley (Brandywine Trail. 2006). The trail parallels the Brandywine Creek and Brandywine River and is maintained by the Wilmington Trail Club. The Pipeline Route crosses the trail at approximately MP 74.19. The crossing of the Brandywine trail is along an existing right-of-way the Pipeline Route is paralleling and is anticipated to be a perpendicular crossing to minimize impacts. As such impacts associated with crossing are minimal.
- The 190-mile long Mason Dixon Trail connects the Appalachian Trail with the Brandywine Trail (Mason Dixon Trail System. 2006). This trail starts at Whiskey Springs, on the Appalachian Trail, in Cumberland County, PA and heads east towards the Susquehanna River. The trail then follows the west bank of the Susquehanna where the Pipeline route crosses the trail at approximately MP 43.88. Mason Dixon Trail eventually ends at the banks of the Brandywine River. The crossing of the Mason Dixon trail is along an existing right-of-way the Pipeline Route is paralleling and is anticipated to be a perpendicular crossing to minimize impacts. As such impacts associated with crossing are minimal.

The Pipeline Route crosses Deer Creek between MP 35 and MP 36 in Harford County Maryland, which is listed by Maryland as a Scenic and Wild River, (MDNR. 2006b). Deer Creek's headwaters form in southern Pennsylvania, and flow east across northern Maryland to the Susquehanna river. The crossing of Deer Creek is along an existing right-of-way the Pipeline Route is paralleling and is anticipated to be a perpendicular crossing to minimize impacts. Furthermore, AES has established Best Management Practices (BMPs) for stream and waterbody crossings, which are included within Appendix B of Resource Report 2, that will be employed to further reduce impacts associated with crossing.

In Pennsylvania, the Pipeline will not cross any state-designated natural; wild areas; or recreation, scenic, (based on review of PDCNR 2003; PDCNR. 2006a; PDCNR 2006c; and PennDOT. 2006).

8.5.4 Coastal Zone Management Areas

The LNG Terminal is located within Maryland's Coastal Zone, and the Pipeline Route is outside of Pennsylvania's Coastal Zone (MDNR 2006; Maryland's Coastal Zone Management Program 2006; PADEP 2006). AES consulted with the Maryland Department of Natural Resources (MDNR), the lead agency for the Coastal Zone Management Program (CZMP), regarding review of the Project for consistency with the Coastal Zone Management Act (CZMA).

As required by the CZMP, AES will prepare a submittal for the State's Coastal Zone Management Program, which will be submitted to the Maryland Department of the Environment, Wetlands and Waterways Program. Evidence that a request for a consistency determination has been filed will be included in submittals to the Commission prior to or within the formal filing of the Resource Reports to the Commission in the fourth quarter 2006.

8.5.5 Other Designated Areas

Contaminated Sites and Landfills

AES contracted with FirstSearch Technology Corporation to prepare an Environmental First Search Report, which summarizes sites/areas listed on various environmental databases maintained by federal and state agencies within 0.25 mile of the Project, including 0.25 mile of the terminal and pipeline alignment (FirstSearch 2006). The databases searched include locations of environmental investigation and cleanup (such as spill sites, or "Superfund" (Comprehensive Environmental Response, Compensation and Liability Act – or CERCLA) sites, operating facilities that generate or manage hazardous waste (Resource Conservation and Recovery Act – RCRA), or facilities listed for evaluation of air emissions, PCB generation or similar factors. The properties that affect land resources, are listed in the regulatory databases searched and that come within 0.25 mile of the project are identified within Table 8.5.5 –1, "Contaminated Site and Landfills Located within 0.25 Mile of the Project."

Note that from this search no areas of the Terminal are listed as having Superfund designations on the property. The neighboring Bethlehem Steel property is identified as being subject to RCRA Corrective Action – this listing is in reference to a 1994 Consent Decree issued to the former Bethlehem Steel Corporation (BSC) to address correction of air emissions issues, landfill operation issues, investigation and corrective action of apparent waste disposal or spill locations, and waste minimization and recycling initiatives. The Consent Decree does not cover the proposed LNG Terminal nor remaining areas of the former shipyard.

Along the pipeline, there are several properties that are listed as Leaking Underground Storage Tank (LUST) spill sites or solid waste (SW) landfill sites that are located within 0.25 mile of the pipeline alignment. There are a limited number of properties that the pipeline crosses that are listed as SW landfill sites – while the pipeline crosses these properties, attention has been given to centerline routing to avoid or minimize the potential to cross the footprint or affected area of waste on the properties.

Special Use Areas

No portions of the LNG Terminal or the Power Plant, and no facilities associated with the Pipeline, occupy or cross any national or state designated or recognized special use areas, including: maple sugar stands; specialty crops; state-designated natural or wild areas; or national or state forests.

AES initiated consultation with county and local planning agencies in June 2006, to identify any locally designated or recognized special use areas owned by local public agencies or private conservation groups, such as county or local parks or conservation land, which will be crossed by, or located within 0.25 miles of the Project.

Based on landowner and field surveys, 22 special use parcels, including campgrounds, cemeteries, quarries, schools and golf courses are within 0.25 Mile of the Sparrows Point Project or the properties containing the use are crossed by the Project. These are identified within Table 8.5.5-2.

Harford County also notified AES that they had purchased three parcels of land within 0.25 mile of the Pipeline route for floodplain protection; however, the Pipeline does not cross these parcels.

8.5.6 Project Impact and Mitigation

Public or Conservation Land

AES is assessing the potential impacts of the Project and, as appropriate and necessary, will propose coordination and/or mitigation measures to avoid impacts on such areas. Mitigation measures are under review by AES; determinations on the method of mitigation will be compiled as the alignment of the project is finalized and design progresses; these measures will be submitted to Commission after the methods are selected prior to or as part of the formal filing to be made the 4th quarter of 2006.

Natural, Recreational, or Scenic Areas

No portion of the LNG Terminal or Power Plant occupies or crosses state and local public land, recreational land, and other special use areas.

Impacts on recreational fishing and boating within the Chesapeake Bay are anticipated to be minor and short-term in duration. On-shore public fishing in currently not allowed at the proposed LNG Terminal location and therefore no impacts will occur. The proposed LNG terminal location is located outside of popular fishing areas identified by the Maryland Department of Natural Resources Chesapeake Bay Report. In addition, the LNG Terminal is located within a heavily industrialized area that the Maryland Department of Environment has several advisories to avoid consuming certain fish caught in the Back River and Patapasco/Baltimore Harbor River area, including channel catfish, common carp, and white catfish.

However, the transit route of the LNG carriers does pass through several of the popular fishing areas identified by the Maryland Department of Natural Resources Chesapeake Bay Report. The LNG Terminal is anticipated to receive one vessel approximately every 2 to 3 days (therefore a total of 2 to 3 LNG ships transiting per week). Based on review of data on vessel traffic for the Chesapeake and Brewerton Channel route that will be used by the LNG ships servicing the proposed Terminal, the average number of ships transiting this route is approximately 1,812 vessels per year. Based on this amount of traffic, the Project is anticipated to have minimal effect on recreational fishing that may result from restrictions on boating encroaching into safety zones around the LNG carriers as established by the U.S. Coast Guard (USCG). A Preliminary Waterway Suitability Assessment (PWSA) has been developed and submitted to the USCG consistent with requirements of the Commission and the USCG for siting of a proposed LNG terminal. AES is currently developing the complete WSA in conjunction with the USCG, including development of ships routing, establishment of security zones, and evaluation of potential effect, if any, on recreational and commercial boating and fishing.

Dredging of the proposed approach channel and turning basin will be required, as discussed in detail in Resource Report 1. The dredging is anticipated to require approximately 24 months for completion, occurring during time limited construction periods based on seasonal restrictions. While dredging is underway, it will also restrict boating in the immediate vicinity during construction. Safety zones established by the USGC will have temporary impacts on boaters, they will need to go around the security zone vs. traversing the security zone, while LNG vessels are berthed. No long-term or significant impacts on recreational boating are expected.

The Pipeline crosses state and local public land, recreational land, and other special use areas. Impacts that may affect use of these lands would be temporary, limited to the duration of construction. Once construction has been completed, land use will be restored to pre-existing condition and use. Impacts during operation would be limited to periodic inspection/ surveillance visits, and sporadic maintenance or

repair activities. Mitigation measures for potential impacts during construction are under review by AES; determinations on the method of mitigation will be compiled as the alignment of the project is finalized and design progresses; these measures will be submitted to the Commission after the methods are selected prior to or as part of the formal filing to be made the 4th quarter of 2006. Mitigation measures are expected to moderate any adverse effects of the Pipeline construction. Therefore, construction and operation of the Pipeline will not impact federal, state, or locally designated or recognized public land, recreational land, or other special use areas.

Contaminated Sites and Landfills

During construction at the proposed LNG terminal site, no adverse effects on construction or operation of the terminal are anticipated from possible contamination. No Federal or State Superfund site status attaches to the proposed terminal property. Past environmental investigation of the terminal location has been performed, and sampling of sediments subject to dredging has been performed (see Resource Report 2 for sampling results and discussion). In summary, some environmental contaminants have been detected in sediments subject to dredging for the project, however the nature and concentrations of compounds of concern in the sediments are consistent with other areas sampled in the Port of Baltimore and the areas to be dredged have been subject to past dredging to establish and maintain existing shipping channels at the former shipyard (see Resource Report 2). These will be addressed through additional characterization in the process of dredge planning and permitting with the Corps of Engineers, and the proposed process to manage and recycle dredged material (see Dredge Management Plan appended to Resource Report 1). Accordingly, while the presence of limited contaminants in dredge sediment will be managed in the course of dredge operations, management plans will eliminate or minimize potential impacts during operation. A positive impact is anticipated from the completion of dredging because the shallowest sediments contain the highest concentrations of compounds of concern and will be removed and effectively managed by the dredging process, thereby improving waterway bottom conditions in the dredge area, and exposing relatively uncontaminated sediments to the water column.

Along the proposed Mid-Atlantic Express Pipeline route, initial evaluation indicates that it is unlikely that construction activities will encounter contaminated soil or groundwater. In the event that soil and/or groundwater contamination is encountered during pipeline construction, AES will immediately notify the landowner and work with the appropriate federal and state agencies in compliance with applicable federal and state laws to ensure proper measures are planned and implemented.

Special Use Areas

The Special Use Area properties that are listed in Table 8.5.5-2 comprise church, park, golf course and some township properties. In the course of communication with the landowners of these properties, care has been taken discuss with owners property access for survey and to understand site-specific uses, limitations and future plans. During field centerline alignment and survey activities, routing has been performed to eliminate or minimize to the extent practicable pipeline routing that would disrupt current and future use consistent with property owner plans. Some property owners have not provided access to date (see Table 8.5.5-2) and AES has used its best engineering and resource management judgment to select a proposed alignment that meets these same goals. Alignments on these specific properties are shown on the Alignment Sheets appended in Appendix 1A of Resource Report 1.

Impacts that may affect use of these lands would be temporary, limited to the duration of construction. Once construction has been completed, land use will be restored to pre-existing condition and use. Impacts during operation would be limited to periodic inspection/ surveillance visits, and sporadic maintenance or repair activities. Mitigation measures for potential impacts during construction are under review by AES; determinations on the method of mitigation will be compiled as the alignment of the project is finalized and design progresses; these measures will be submitted to Commission after the methods are selected prior to or as part of the formal filing to be made the 4th quarter of 2006.

8.6 Visual Resources

No portions of the LNG Terminal or the Power Plant, and no facilities associated with the Pipeline, occupy or cross any nationally designated or recognized visual resources or visually sensitive areas, including scenic roads, trails, or rivers (based on review of America's Byways 2006, NPS 2006a, NPS 2006b, NPS 2006c, NPS 2006d, NPS 2006e).

No portions of the LNG Terminal or the Power Plant occupy or cross any state-designated scenic roads (based on review of Maryland Department of Transportation 2006).

The Pipeline Route crosses Maryland State Route (SR) 23 at MP 30, SR 24 at MP 32.5 and SR 543 at MP 36.75, as well as US Route 1 at MP 23.5, which are all part of the Gunpowder Crossing Scenic Byway as established by the Maryland Department of Transportation (Maryland Department of Transportation 2006). Crossings of the Gunpowder Crossing Scenic Byway is along an existing right-of-way the Pipeline Route is paralleling and is anticipated to be a perpendicular crossing to minimize impacts. As such impacts associated with crossing are minimal.
No facilities associate with the Pipeline within the state of Pennsylvania occupy or cross state-designated scenic roads (Pennsylvania Department of Transportation).

The proposed Terminal Site is located within an existing steel manufacturing and former shipbuilding facility, and therefore will be seen in the context of an existing industrial area. Appendix 8B contains photographs that contain view location and direction of view maps of the Terminal Site from four vantage points: the water's edge at the Community Center at Turner's Station (northwest of the proposed Terminal Site), Hawkins Point (southwest of the proposed Terminal Site), MTA Police Building/Coffin Point (west-northwest of the Terminal Site), and from the alignment of the existing shipping channel, north of the Brewerton Channel (approximately due west of the Terminal Site). Also included within Appendix 8B are Photographic Simulations of the LNG Terminal and the Power Plant as proposed by AES and consistent with the terminal layout provided in Resource Report 1. Potential impacts on visual

resources and visually sensitive areas (e.g., residences) were minimized by designing the Project to be consistent with existing or planned industrial land uses at and adjacent to the Project Area.

Construction of the Pipeline will require two crossings of Gunpowder Falls State Park. The crossings will be from MPs 18.15 to 18.18 and 18.36 to 18.38, as described above in Section 8.5.1. Both segments of the Pipeline that will cross Gunpowder Falls State Park will utilize existing powerline rights-of-way to cross these portions of the park. Insofar as the types of utility corridors to be used are powerline corridors, the existing viewsheds comprise the alignment of powerline lattice towers following a substantially tree-cleared corridor. The pipeline alignment will be located approximately 25-ft off the tower base foundations (preliminary determination subject to change based on stability analysis). During construction, some limited tree cutting may be needed for safe worker operation and pipeline installation. However, once installation is complete, the maintained ROW should not require significantly more cleared corridor that already exists. See the alignment sheets in Appendix 1A of Resource Report for the specific routing proposed at these locations.

The Pipeline route will cross the Octorara River in Lancaster and Chester Counties of Pennsylvania and the Lower Brandywine River in Chester County, Pennsylvania, which are designated as state scenic rivers (PDCNR 2006a).

- The Octorara River crossing parallels the existing route of the Columbia Gas Transmission pipeline corridor and its crossing of the Octorara. The properties on both sides of the river at the crossing location are owned and maintained by the Chester Water Authority which operates a municipal water supply from the Octorara Reservoir located west of the pipeline alignment.

- The Lower Brandywine River crossing is also an existing crossing location of the Columbia Gas Transmission pipeline corridor. Existing viewshed elements at this location include a local roadway and stone bridge, and a rail-to-trail pathway present on the easterly side of the river near the crossing location. The proposed pipeline crossing location is to the south of these features, avoids both to the extent feasible and is not anticipated to affect either the alignment or operation, once the Mid-Atlantic Express pipeline is constructed, of either feature.

Both waterbodies are characterized relative to resource features in Resource Report 3, and the crossings will be managed consistent with waterbody crossing construction and mitigation procedures summarized in Resource Report 2. Visual impacts will be present during construction and will be limited to visible common construction equipment typically associated with trenching construction techniques.

Also, as stated above in Section 8.4, there are 116 existing residences within 50 feet of the construction workspace for the Project, and a number of additional residences that are located between approximately 75 and 650 feet from the pipeline right-of-way. The Pipeline Route will be visible from these residences during construction. Existing land use will be restored once constructed. Since the proposed route parallels and will overlap to the extent practicable, the existing Columbia pipeline route, visible features of the route (primarily pipeline markers) will be similar to the existing visible corridor.

AES routed the Pipeline so that construction and operation activities will primarily be adjacent to existing permanent utility and highway rights-of-way. Similarly, mainline valves and interconnect facilities will be constructed within the permanent pipeline right-of-way, in areas of agricultural or open land. Mainline valves and interconnect facilities will be relatively small and will not present a significant change in the visual quality of areas surrounding the pipeline right-of-way. Also, AES will install visual screening at these facilities to soften the impact of their appearance. Therefore, the Pipeline is anticipated to be consistent with the existing landscape that is currently visible from visual resources and visually sensitive

areas, and will have no or will minimize significant adverse effect on these visual resources and visually sensitive areas.

If AES receives any new information from county and local planning agencies, AES will further assess the potential impacts by the Project on any locally designated or recognized visual resources or visually sensitive areas and, as appropriate and necessary, will propose coordination and/or mitigation measures to avoid impacts on such.

8.7 Applications for Rights-of-Way and Other Land Use

The Project does not cross or otherwise affect any land over which federal land-managing agencies have jurisdiction. Therefore, no applications for rights-of-way or other proposed land use have been or will be filed with the Commission.

8.8 References

America's Byways. 2006. America's Byways. http://www.byways.org/browse/states/PA/, accessed June 15, 2006.

Baltimore County Master Plan 1989-2000, as amended July 27, 1989

Brandywine Trail. 2006. Welcome to the Brandywine Trail. http://www.geocities.com/brandywinetrail/index.html accessed September 9, 2006.

Census. 2006. American Indian Reservations. http://www.census.gov/dmd/www/pdf/512indre.pdf, accessed June 15, 2006.

FirstSearch Technology Corporation. 2006. Environmental First Search Report. Sparrows Point MD 21219.

Harford County Department of Parks and Recreation. 2006. Ma and Pa Heritage Corridor http://www.harfordcountymd.gov/parks_rec/ma_pa_corridor.htm accessed September 6, 2006.

Maryland Department of Natural Resources (MDNR). 2006a. Gunpowder Falls State Park. http://www.dnr.state.md.us/publiclands/central/gunpowder.html, accessed September 6, 2006.

MDNR. 2006b. All Maryland State Parks, Forests, and WMA. shttp://www.dnr.state.md.us/publiclands/all.html, accessed September 9, 2006.

MDNR. 2006c. Blue Crab. http://www.dnr.state.md.us/fisheries/education/crab/bluecrabfacts.html , accessed September 11, 2006.

MDNR. 2006b. Scenic Rivers. http://www.dnr.state.md.us/resourceplanning/scenicrivers.html , accessed September 9, 2006.

MDNR. 2006e. Maryland's Coastal Zone Management Program. http://www.dnr.state.md.us/bay/czm/aboutczm.html, accessed June 15, 2006.

Maryland Department of Transportation. 2006. Maryland Scenic Byways http://www.sha.state.md.us/exploremd/oed/scenicByways/scenicbyways.asp?id=H14+H12 , accessed September 13, 2006.

Maryland Environmental Trust. 2006. The Maryland Environmental Trust's Land Conservation Center. http://www.conservemd.org/, accessed June 15, 2006.

Maryland and Pennsylvania Railroad Preservation Society. 2006. Preservers of the Historic Ma & Pa Railroad Preservation Society http://www.maandparailroad.com/links.html , accessed September 6, 2006.

Mason Dixon Trail System. 2006. http://www.masondixontrail.org/ , accessed September 9, 2006.

National Park Service. 2006a. Parks and Recreation, Maryland. http://www.nps.gov/applications/parksearch/state.cfm?st=md accessed June 15, 2006.

National Park Service. 2006b. Parks and Recreation, Pennsylvania. http://data2.itc.nps.gov/parksearch/state.cfm?st=pa, accessed June 15, 2006.

National Park Service. 2006c. National Natural Landmarks. http://www.nature.nps.gov/nnl/Registry/USA_Map/index.cfm, accessed June 15, 2006.

National Park Service. 2006d. Wild and Scenic Rivers, by State. http://www.nps.gov/rivers/wildriverslist.html, accessed June 15, 2006.

National Park Service. 2006e. National Trails System. http://www.nps.gov/nts/legislation.html, accessed June 15, 2006.

National Park Service. 2006f. Indian Reservations in the Continental United States Map and Map Index. http://www.cr.nps.gov/nagpra/documents/RESERV.PDF, accessed June 15, 2006.

National Wilderness Institute. 2006. Wilderness Areas Map Data. http://www.wilderness.net/index.cfm?fuse=NWPS, accessed June 15, 2006.

Office of Ocean and Coastal Resource Management (OCRM), National Ocean Service, National Oceanic and Atmospheric Administration. 2006. Coastal Zone Management Program. http://www.ocrm.nos.noaa.gov/czm/, accessed June 15, 2006.

Pennsylvania Department of Conservation and Natural Resources (PDCNR), Bureau of Recreation and Conservation. 2003. Pennsylvania Heritage Parks Program Manual, Ninth Edition. http://www.dcnr.state.pa.us/brc/heritageparks/, accessed June 15, 2006.

PDCNR. 2006a. Pennsylvania Scenic Rivers Program. http://www.dcnr.state.pa.us/brc/rivers/scenicrivers/locationmap.aspx, accessed June 15, 2006.

PDCNR. 2006b. Pennsylvania State Parks. http://www.dcnr.state.pa.us/stateparks/parks/, accessed June 15, 2006.

PDCNR. 2006c. Pennsylvania State Natural Areas.
http://www.dcnr.state.pa.us/stateparks/natural/naturalareas.aspx, accessed June 15, 2006.

PDCNR. 2006d. Pennsylvania State Forest Index.
http://www.dcnr.state.pa.us/forestry/stateforests/index.aspx, accessed June 15, 2006.

PennDOT. 2006. PA Byways Statewide Map.
http://www.dot.state.pa.us/penndot/bureaus/PlanRes.nsf/infoBPRPABywaysStatewideMap, accessed June 15, 2006.

Pennsylvania Fish and Boat Commission. 2006. Pennsylvania Water Trails.
http://sites.state.pa.us/PA_Exec/Fish_Boat/watertrails/trailindex.htm, accessed June 15, 2006.

Pennsylvania Department of Environmental Protection (PADEP). 2006. About Pennsylvania's coastal Zone Management Program.
http://www.dep.state.pa.us/river/newdesign/aboutczm.htm, accessed June 15, 2006.

Pennsylvania Game Commission. 2006. State Game Lands, County Information.
http://www.pgc.state.pa.us/pgc/cwp/view.asp, accessed June 15, 2006.

Pennsylvania Greenways Program. 2006. Pennsylvania's Major Greenway Corridors.
http://www.pagreenways.org/majorgreenways.asp, accessed June 15, 2006.

Pennsylvania Visitors Network. 2006. County Links for Lancaster and Chester Counties, Pennsylvania. http://pavisnet.com, accessed June 16, 2006.

Star Spangled Banner National Historic Trail Study. 2005. Proposed Star Spangled Banner Trail Through Maryland and Washington, D.C. Studied by the National Park Service http://www.nps.gov/phso/jstarspan/ , accessed September 6, 2006

The Nature Conservancy. 2006. Where We Work.
http://www.nature.org/wherewework/northamerica/states/, accessed June 15, 2006.

United States Department of Agriculture, U.S. Forest Service (USFS). 2006a. Find a Forest by State.
http://www.fs.fed.us/recreation/map/state_list.shtml, accessed June 15, 2006.

United States Fish and Wildlife Service (USFWS). 2006. America's National Wildlife Refuge System.
http://www.fws.gov/refuges/refugeLocator.html, accessed June 15, 2006.

Appendix 8A

Agency Correspondence Regarding Land Use

Appendix 8B

Photo Simulation